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Research Article

Schools' Research Operations, Planning and Development: Bases for Policy Enhancement

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ABSTRACT

This study was conducted to determine the schools' research operations, planning, and development as bases for policy enhancement in the Schools Division of Iloilo for school year 2023-2024. The independent variables included age, sex, length of service, educational attainment, and congressional district, while the dependent variables were schools' operations, planning, and research development. A total of 385 elementary teachers were selected using Slovin's formula, and data were collected through a researcher-made questionnaire. Statistical analyses, including frequency count, percentage, mean, t-test, One-way ANOVA, and Pearson's r, were employed to interpret the results. Findings indicated that most respondents were young, predominantly female, with substantial lengths of service. Most had a bachelor's degree and across various congressional districts, with the Second Congressional District having the highest representation. The study revealed that teachers rated the level of schools' research operations as high, research planning as very high, and research development as high. No significant differences were found in assessments based on the teachers' profiles. However, a strong positive correlation was noted between research operations and planning, as well as between planning and development, while the relationship between operations and development was weak and non-significant. These findings underscore the need for policy enhancements that foster collaboration and resource allocation in educational research, ultimately contributing to more effective teaching practices and improved learner outcomes. Implementing targeted policies that address identified gaps can empower teachers and strengthen the overall research framework within schools.

Keywords*: School, Research, Operations, Planning, Development*

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Introduction

The Basic Education Governance Act of 2001 underscored the critical role of research in managing and administering the basic education system. In response, the Department of Education (DepEd) has made significant efforts to strengthen research, including various initiatives under the Basic Education System Reform Agenda (BESRA) and the establishment of the Research, Innovation, and Policy Evaluation Secretariat (RIPES) in 2003. Building on these foundations, the Policy Research and Development (PRD) unit was created to conduct, support, and manage empirical studies, promoting evidence-based decision-making throughout the Department. Furthermore, the policy development process established by DepEd Order 13, s. 2015 emphasizes the use of evidence in policy formulation (DepEd, 2020).

Given the increasing demand for quality research aligned with industry trends, it is essential to understand the specific needs of researchers (Villalobos, 2020). Recent studies indicate that effective research operations require dedicated facilities, adequate funding, and well-defined policies (Huisman & Smits, 2018). Strategic planning should align research initiatives with institutional missions and foster collaborations (Drew & Smith, 2018). Moreover, promoting a vibrant research culture through training and interdisciplinary collaboration is crucial (Lee & Hicks, 2018). However, many schools struggle to allocate sufficient funding and face challenges in identifying research needs. This underscores the necessity for equitable research opportunities and fair resource allocation.To address these challenges, policymakers should consider refining existing frameworks, such as those outlined in DepEd Order Nos. 13 and 24, to better support local educational research contexts.

Objectives

This study aimed to determine the schools' research operations, planning and development as bases for policy enhancement in the Schools Division of Iloilo for the school year 2023-2024. Specifically, this study sought to determine:

- The level of schools' research operations, planning and development as assessed by the teachers.
- The significant differences in the level of schools' research operations, planning and development as assessed by the teachers when they are classified according to age, sex, length of service, educational attainment and congressional district.
- The significant relationships among the level of schools' research operations, planning and development.

Methods

Research Design

The study utilized a descriptive-correlational research design. According to Smith et. al. (2019), a descriptive-correlational research design was used to explore and examine the relationships between variables in a given population or sample. It aimed to describe the characteristics of a particular group and identify associations or correlations between variables without manipulating them. In a descriptive-correlational research design, researchers collected data on multiple variables of interest and analyzed the relationships between them. The main objective was to determine whether a relationship existed between variables and to what extent they were related. This type of design did not establish causality but provided valuable insights into patterns and associations.

Respondents

The study's respondents consisted of 385 elementary teachers from the Schools Division of Iloilo, Province of Iloilo, Philippines, for school year 2023–2024, selected from a total population of 10,164. Stratified random sampling was used to identify the respondents, employing Slovin's formula, a statistical tool that calculates an appropriate sample size based on the desired margin of error to ensure representativeness. This approach guarantees that the sample accurately reflects the population, facilitating reliable data collection and analysis. The distribution of the respondents is shown in Table 1.

Table 1. Distribution of the Respondents

Congressional District	N	n	%
First Congressional District	1,638	62	16.10
Second Congressional District	1,657	62	16.10
Third Congressional District	2,606	99	25.71
Fourth Congressional District	1,677	64	16.68
Fifth Congressional District	2,586	98	25.45
Total	10,164	385	100%

Research Instrument

A researcher-made questionnaire was utilized as the data collection tool or instrument to determine the schools' operations, planning, and research development as assessed by the respondents. The research instrument comprised the following parts:

- Part 1 consisted of personal data, including: Age, categorized as young (35 years old and below) and old (36 years old and above), Sex (male and female), Length of service, categorized as short (15 years and below) and long (16 years and above), educational attainment (bachelor, master, and doctorate), and congressional district (first, second, third, fourth, and fifth);
- Part 2 comprised 15 items focusing on the schools' research operations;
- Part 3 included 15 items that specifically addressed the schools' research planning; and
- Part 4 focused on the schools' research development with 15 items included.

The foundation for formulating the questions was based on DepEd Order Nos. 4, s. 2016, 43, and 13 s. 2015, relevant theories, and literature. The data collection instrument underwent a validation process with the help of research experts and a statistician to ensure its suitability. The Good and Scates Criteria for Validation were used to assess the questions for clarity, relevance, and inclusivity. Feedback from four expert panels led to adjustments in the questionnaire, enhancing its credibility. Each item was evaluated for necessary modifications, with panelists encouraged to offer comments and recommendations, which were incorporated into the final version.

The validated questionnaire was pilot-tested on 30 teachers from the researcher's affiliated school, who were not part of the main study population, to determine its reliability. Cronbach's alpha was used to assess the internal consistency of the questionnaire, indicating how closely related the items are as a group; a high alpha value suggests that the items measure the same underlying construct, thereby enhancing the credibility and validity of the collected data. The results indicated high reliability, with values of 0.89 for school research operations, 0.85 for school research planning, and 0.88 for school research development, all exceeding the acceptable threshold of 0.70. This indicated that the questionnaire was highly reliable.

Data Collection

Before conducting the survey, the researcher obtained permission from the dean of the graduate school to distribute the research instrument to the respondents. Clearance for the study was secured from the Schools Division of Iloilo, and approval was subsequently sought from the school heads through the supervisor in each district involved in the research. The researcher distributed both hard and electronic copies of the research instrument, along with instructions, to the schools through the District Supervisor. All data collected from the respondents and schools was treated with utmost confidentiality and used solely for the purposes of the study. Respondents had the option to submit their completed questionnaires via email or to deliver them personally to the school. After administering the research instrument, the collected data were collated, encoded and tabulated.

Data Analysis

After data collection, the research instrument was collected, encoded, and tallied, with all computations processed using the Statistical Package for Social Sciences (SPSS) software. The analysis utilized various statistical tools, including frequency counts to determine respondent distribution by demographics, percentages for the same variables, means for evaluating schools' level of research operations, planning, and development, t-tests to compare differences based on demographics, One-way ANOVA to assess significant differences regarding educational attainment and congressional district, and Pearson's r to examine relationships between variables. The obtained p-values were compared to a significance level of 0.05 to determine the acceptance or rejection of the null hypotheses.

Ethical Considerations

The researcher obtained the respondents' free, prior, and informed consent, ensuring that they understood their right to withdraw from the study at any time if they deemed it necessary. Respondents were assured that no information revealing their identities would be released or published without their consent. To uphold data confidentiality, all collected materials were disposed of appropriately, and soft copies of the data were permanently deleted to eliminate any possibility of future retrieval. Additionally, a detailed plan for data destruction was implemented to ensure compliance with ethical standards, reinforcing the commitment to protecting participants' privacy throughout the research process.

Limitations

While this study provided valuable insights into the research operations, planning, and development within the Schools Division of Iloilo, several limitations were acknowledged. The sample was limited to elementary teachers within a specific geographic area, which affected the generalizability of the findings to other divisions, regions or educational levels. Additionally, the reliance on self-reported data introduced potential bias, as respondents might have presented socially desirable responses rather than their true perceptions. Future research could expand the scope to include a more diverse sample and utilize mixed methods to enrich the understanding of research practices in different educational contexts.

Results and Discussion

Level of Schools' Research Operations as Assessed by Teachers

The overall level of research operations in schools, as assessed by teachers, was high, with a mean score of 3.96. The highest rating was for the establishment of clear ethical guidelines, which received a score of 4.90, followed by encouragement of collaborative initiatives at 4.86 and promotion of a research culture through workshops at 4.77. However, the lowest score was for sufficient funding for research activities, at 1.86, indicating a need for more financial support. Additionally, monitoring and evaluation systems scored 2.65, and access to external collaborations scored 3.05, both suggesting areas for improvement. The results imply that while schools exhibit a high level of research operations, particularly in establishing ethical guidelines and promoting collaboration, there is an urgent need for increased financial support and improved monitoring and evaluation systems to enhance overall research effectiveness. These findings are consistent with studies highlighting the significance of ethical research practices and effective monitoring for institutional development. Ederio et al. (2023) highlighted that teachers were informed about ethical guidelines, collaborative activities, and research culture, emphasizing the educational institution's role as a foundational hub for scientific studies and the pursuit of knowledge. Similarly, Kabonaga (2019) stressed the necessity for improved systems to monitor, evaluate research, and facilitate collaborations, underscoring that effective monitoring and evaluation are essential for development. Furthermore, the study emphasized that robust research practices and collaboration are vital for enhancing educational quality. Addressing these areas can significantly improve research outcomes in educational settings.

Table 2. Level of Schools' Research Operations as Assessed by Teachers

Items	Mean	Description
1. Has available research facilities for students and faculty members.	3.54	High
2. Provides sufficient funding for research activities and projects.	1.86	Low
3. Has a well-defined and easily accessible research policy.	3.65	High
4. Encourages collaborative research initiatives among faculty members and students.	4.86	Very High
5. Promotes a research culture through workshops, seminars, and training sessions.	4.77	Very High
6. Provides technical support and assistance for research-related activities.	3.99	High
7. Allocates sufficient time for faculty members to engage in research endeavors.	4.63	Very High
8. Has a comprehensive system for monitoring and evaluating research progress and outcomes.	2.65	Moderate
9. Encourages the dissemination of research findings through conferences and publications.	4.63	High
10. Aligns research initiatives with its overall mission and strategic goals.	4.70	Very High
11. Facilitates access to external research collaborations and partnerships.	3.05	Moderate
12. Has a dedicated research committee or department overseeing research activities.	4.37	Very High
13. Provides regular training sessions to enhance research skills among faculty and students.	3.33	Moderate
14. Has established clear guidelines for ethical conduct in research activities.	4.90	Very High
15. Encourages interdisciplinary research collaborations and projects.	4.54	Very High
Overall Mean	3.96	High

Legend: Scale of Means 1.00 – 1.80 Very Low (VL), 1.81 – 2.60 Low (L), 2.61 – 3.40 Moderate (M), 3.41 – 4.20 High (H), 4.21 – 5.00 Very High (VH)

Level of Schools' Research Planning as Assessed by Teachers

The overall level of research planning in schools, as assessed by teachers, was very high, with a mean score of 4.46. The highest ratings were given to the responsiveness of research plans addressing emerging trends with a mean score of 4.88, inclusivity in planning with a mean score of 4.81, and the integration of new technologies with a mean score of 4.78. However, the lowest mean was for conducting regular assessments of research needs, which was 3.56. The results indicate that while schools demonstrate a very high level of research planning, particularly in responsiveness and inclusivity, there is a critical need to enhance the systematic assessment of research priorities, addressing challenges such as funding and teacher workloads to fully leverage emerging educational trends and improve overall research engagement. Supporting studies highlight the importance of integrating emerging educational trends and the challenges teachers face, such as lack of funding and heavy workloads, which affect their engagement in research. Mobo (2021) supported these claims in their study, "The Role of Emerging Trends in Education," which found that emerging technologies like Augmented Reality (AR) and Virtual Reality (VR) are increasingly integrated into practical research exercises, enhancing educational experiences even in home settings.

Similarly, Ulla (2018) explored the "Benefits and Challenges of Doing Research: Experiences from Philippine Public-School Teachers," revealing that while teachers' motivations for research were primarily personal rather than professional, they acknowledged the benefits for their teaching practices and career development. However, the study also identified challenges affecting research planning such as a lack of financial support, heavy teaching loads, inadequate research skills and knowledge, and limited access to research materials and resources.

Table 3. Level of Schools' Research Planning as Assessed by Teachers

Items	Mean	Description
1. Has a strategic research plan that aligns with its educational objectives.	4.15	Very High
2. Conducts regular assessments to identify research needs and priorities.	3.56	Very High
3. Has research plan which includes a well-defined budget for research-related activities	4.25	Very High
4. Has a system for identifying and promoting promising research projects	3.73	Very High
5. Incorporates research initiatives into its long-term strategic planning	4.51	Very High
6. Ensures that research planning involves input from faculty and students.	4.58	Very High
7. Integrates new technologies/methods in its research plan.	4.78	Very High
8. Encourages innovative and interdisciplinary research planning initiatives.	4.69	Very High
9. Conducts regular milestones and progress evaluations.	4.64	Very High
10. Promotes the dissemination of research planning goals and outcomes among stakeholders.	4.62	Very High
11. Has a responsive research plan on emerging educational trends and demands.	4.88	Very High
12. Has a mechanism for reviewing and updating research planning strategies.	4.47	Very High
13. Encourages collaboration and networking with external partners in research planning.	4.64	Very High
14. Includes measures for fostering a culture of research excellence.	4.61	Very High
15. Ensures that research planning is inclusive and accounts for diverse perspectives and needs.	4.81	Very High
Overall Mean	4.46	Very High

Legend: Scale of Means 1.00 – 1.80 Very Low (VL), 1.81 – 2.60 Low (L), 2.61 – 3.40 Moderate (M), 3.41 – 4.20 High (H), 4.21 – 5.00 Very High (VH)

Level of Schools' Research Development as Assessed by Teachers

The overall level of research development in schools, as assessed by teachers, was high with a mean score of 4.13. The highest ratings were for encouraging participation in research conferences, promoting interdisciplinary collaboration, and ensuring alignment with the institution's mission, with mean scores of 4.83, 4.77, and 4.74, respectively. However, the lowest mean was for having a structured mentorship program, followed by adequate resources and regular evaluations of research infrastructure, which were all rated at a moderate level. The results imply that, while schools excelled in fostering engagement and alignment with goals, improvements are needed in mentorship and resource provision for more effective

research development. These findings were consistent with those of Uy and Callo's (2023) study entitled "Teachers' Readiness and Supportive Environment Toward Better Research Productivity and Skills: Basis for a Policy Development on Research Program". Their study revealed that teachers were well-equipped with the readiness needed for research studies. School-related factors significantly influenced teachers' engagement in research investigations. Teachers' ability to conduct research projects was greatly influenced by cognitive ability, school support, principal leadership, and research culture. Teachers were also well-versed in each part of a research paper. Research skills were significantly related to readiness and school factors.

Table 4. Level of Schools' Research Development as Assessed by Teachers

Items	Mean	Description
1. Provides adequate resources and facilities to support research activities.	2.78	Moderate
2. Offers research grants and funding opportunities for faculty and students.	3.96	High
3. Has a structured mentorship program to guide and support research development.	2.69	Moderate
4. Encourages interdisciplinary collaboration for research projects.	4.77	Very High
5. Provides training and workshops on research methodologies and techniques.	4.26	Very High
6. Promotes a culture of research excellence among faculty and students.	4.62	Very High
7. Actively supports the dissemination and publication of research findings.	3.91	High
8. Incentivizes faculty and students for research publications and presentations.	4.16	High
9. Collaborates with external institutions or organizations for joint research initiatives.	4.51	Very High
10. Regularly evaluates and updates its research infrastructure and resources.	2.84	Very High
11. Fosters a supportive environment for conducting ethical and impactful research.	4.69	Very High
12. Recognizes outstanding contributions to research development.	4.62	Very High
13. Encourages participation in research conferences and seminars.	4.83	Very High
14. Promotes the integration of research into curriculum development and teaching practices.	4.50	Very High
15. Ensures that research activities are aligned with the institution's overall mission and vision.	4.74	Very High
Overall Mean	4.13	High

Legend: Scale of Means 1.00 – 1.80 Very Low (VL), 1.81 – 2.60 Low (L), 2.61 – 3.40 Moderate (M), 3.41 – 4.20 High (H), 4.21 – 5.00 Very High (VH)

Significant Differences in The Level of Schools' Research Operations as Assessed by Teachers When They Were Classified According to Age, Sex, and Length of Service

The assessment conducted by teachers revealed no significant differences in schools' research operations when categorized by age, sex, or length of service. The t-test results indicated consistent assessments across younger and older teachers, male and female teachers, and those with varying lengths of service. In each case, the null hypothesis was accepted, suggesting that these factors did not influence teachers' evaluations of research operations.

The uniformity in assessments of schools' research operations, regardless of age, sex, or length of service, suggests a stable standard of research practices across the board, which aligns with the study's objective of promoting a supportive research environment; however, the lack of significant differences also underscores the need for targeted interventions to address specific challenges that may still exist within diverse teacher demographics. The findings aligned with those of Tarrayo et al. (2020) in their study, "Teachers and Research Practices: Perspectives from English Language Educators in a Philippine University," which also highlighted teachers' positive perceptions and strong interest in research. The study concluded by emphasizing that a supportive research environment within schools is essential for fostering teachers' enthusiasm for research.

Table 5. Significant Differences in The Level of Schools' Research Operations as Assessed by Teachers When They Were Classified According to Age, Sex, and Length of Service

Variables	Mean	t	df	p-value	Remarks
Age					
Young	3.97	1.607	383	0.372	Not Significant
Old	3.95				
Sex					
Male	3.97	0.836	383	0.899	Not Significant
Female	3.96				
Length of Service					
Short	3.97	0.147	383	0.800	Not Significant
Long	3.97				

Legend: p-value ≤.05 – Significant; p-value >.05 – Not Significant

Significant Differences in The Level of Schools' Research Operations as Assessed by Teachers When They Were Classified According to Educational Attainment and Congressional District

In the assessment conducted by teachers, no significant differences were found in schools' research operations based on educational attainment or congressional district. The f-test results indicated a p-value of 0.999 for educational attainment and 0.906 for congressional district, both exceeding the 0.05 significance level, leading to the acceptance of the null hypothesis. The lack of significant differences in teachers' assessments of research operations based on educational attainment or congressional district implies a shared understanding of research practices across diverse backgrounds, reinforcing the study's objective to promote a unified research culture; however, it also highlights the need to explore how varying educational contexts might still influence the effectiveness and implementation of research initiatives in different districts. The findings are consistent with a previous study by Gunyel and Bilgivar (2023) on teachers' attitudes toward educational research, which emphasized the importance of educational research for professional development and its positive impact on various educational areas, including teaching strategies and student growth.

Table 6. Significant Differences in The Level of Schools' Research Operations as Assessed by Teachers When They Were Classified According to Educational Attainment and Congressional District

Variables	Mean	F	df	p-value	Remarks
Educational Attainment					
Bachelor	3.96	0.001	2	0.999	Not Significant
Master	3.96				
Doctorate	3.96				

Variables	Mean	F	df	p-value	Remarks
Congressional District					
First	3.97	0.255	4	.906	Not Significant
Second	3.95				
Third	3.96				
Fourth	3.97				
Fifth	3.97				

Legend: p-value ≤.05 – Significant; p-value >.05 – Not Significant

Significant Differences in The Level of Schools' Research Planning as Assessed by Teachers When They Were Classified According to Age, Sex, and Length of Service

In the teachers' assessment, no significant differences were found in schools' research planning based on age, sex, or length of service. The t-test results indicated no significant variation between younger and older teachers, male and female teachers, or those with short and long service, with p-values exceeding 0.05 in all cases. Consequently, the null hypothesis was not rejected, suggesting that teachers' perceptions of research planning are consistent across demographics. This uniformity highlights the stability of research practices within educational contexts. The absence of significant differences in teachers' assessments of research planning across demographics indicates a consistent perception of research practices, aligning with the study's objective to promote a cohesive research environment; however, this uniformity also suggests the need for further investigation into how diverse experiences and backgrounds might inform specific aspects of research planning and development. These findings aligned with the study of Almonicar (2023) on the research capability of teachers in public secondary schools in Masbate, Philippines, which provided basis for developing programs to enhance teachers' research capabilities.

Table 7. Significant Differences in The Level of Schools' Research Planning as Assessed by Teachers When They Were Classified According to Age, Sex, and Length of Service

Variables	Mean	t	df	p-value	Remarks
Age					
Young	4.46	0.197	383	0.155	Not Significant
Old	4.46				
Sex					
Male	4.48	0.964	383	0.417	Not Significant
Female	4.44				
Length of Service					
Short	4.45	-0.330	383	0.252	Not Significant
Long	4.47				

Legend: p-value ≤.05 – Significant; p-value >.05 – Not Significant

Significant Differences in The Level of Schools' Research Planning as Assessed by Teachers When They Were Classified According to Educational Attainment and Congressional District

In the teachers' assessment, no significant differences were found in schools' research planning based on educational attainment or congressional district. The f-test results indicated no substantial variations between teachers with bachelor's, master's, or doctorate degrees, and across different congressional districts, with p-values exceeding 0.05. Thus, the null hypothesis was not rejected, suggesting a consistent approach to research planning regardless of educational background or location. The consistent findings across educational attainment and congressional districts imply that the foundational principles of research planning are uniformly understood among teachers,

which aligns with the study's objective of promoting a cohesive research planning framework; however, this uniformity also underscores the potential need for tailored support and resources to address specific challenges faced by different educational backgrounds and geographical contexts. These findings aligned with Gunyel and Bilgivar's (2023) study, which highlights the role of educational research in enhancing professional development and supporting learner growth.

Table 8. Significant Differences in The Level of Schools' Research Planning as Assessed by Teachers When They Were Classified According to Educational Attainment and Congressional District

Variables	Mean	f	df	p-value	Remarks
Educational Attainment					
Bachelor	4.45	2.071	2	0.12	Not Significant
Master	4.51				
Doctorate	4.37				
Congressional District					
First	4.47	0.115	2	0.977	Not Significant
Second	4.47				
Third	4.46				
Fourth	4.46				
Fifth	4.45				

Legend: p-value ≤.05 – Significant; p-value >.05 – Not Significant

Significant Differences in The Level of Schools' Research Development as Assessed by Teachers When They Were Classified According to Age, Sex, and Length of Service

In the teachers' assessment, no significant differences were found in the level of schools' research development based on age, sex, or length of service. The t-tests yielded high p-values, indicating consistency across demographic categories. This suggests that whether teachers were younger or older, male or female, or had varying lengths of tenure, perceptions of research development remained uniform. The findings imply a stable approach to research practices within educational settings. The uniformity in teachers' perceptions of research development across age, sex, and length of service suggests that foundational research practices are well-established and understood among educators, supporting the study's objective of fostering a collaborative research culture; however, this consistency also highlights the need for ongoing professional development to address the diverse needs and perspectives that can enhance research initiatives within schools. These results aligned with Faber et al.'s (2018) study, which also found no demographic differences in teacher functionality levels, highlighting themes of mentorship and the connection between research and teaching experiences.

Table 9. Significant Differences in The Level of Schools' Research Development as Assessed by Teachers When They Were Classified According to Age, Sex, and Length of Service

Variables	Mean	t	df	p-value	Remarks
Age					
Young	4.12	0.121	383	0.966	Not Significant
Old	4.13				
Sex					
Male	4.13				
Female	4.12	0.475	383	0.656	Not Significant

Variables	Mean	t	df	p-value	Remarks
Length of Service					
Short	4.12	-0.384	383	4.489	Not Significant
Long	4.13				

Legend: p-value ≤.05 – Significant; p-value >.05 – Not Significant

Significant Differences in the Level of Schools' Research Development as Assessed by Teachers When They Were Classified According to Educational Attainment and Congressional District

The assessment conducted by teachers found no significant differences in schools' research development based on educational attainment or congressional district. The f-tests yielded high p-values, indicating consistency in research development regardless of teachers' degrees or school locations. Consequently, the null hypothesis was not rejected, suggesting a stable approach to research across diverse educational levels. This indicates that teachers adopt similar research practices irrespective of their background or location. The consistent assessments of research development across various educational attainments and congressional districts imply that teachers share a common understanding of effective research practices, aligning with the study's objective of promoting a unified research culture; however, this finding also underscores the importance of exploring how specific local contexts and educational backgrounds could further enrich and diversify research initiatives in schools. These findings aligned with Questar and Marzo's (2022) study, which emphasized the importance of support from school administrators for teachers' professional growth in research writing, presentation, and publication.

Table 10. Significant Differences in The Level of Schools' Research Development as Assessed by Teachers When They Were Classified According to Educational Attainment and Congressional District

Variables	Mean	f	df	p-value	Remarks
Educational Attainment					
Bachelor	4.11	0.730	2	0.048	Not Significant
Master	4.16				
Doctorate	4.12				
Congressional District					
First	4.13	0.140	2	0.967	Not Significant
Second	4.14				
Third	4.10				
Fourth	4.12				
Fifth	4.13				

Legend: p-value ≤.05 – Significant; p-value >.05 – Not Significant

Significant Relationships Among the Level of Schools' Research Operations, Planning and Development

A positive correlation exists between research operations and planning, indicating that effective operations enhance planning. A stronger correlation was found between research planning and development, suggesting well-planned research leads to better outcomes. However, the relationship between research operations and development was weaker and not statistically significant. This implies that strong research practices do not directly translate into overall development. Additional factors may influence research improvement. Supporting studies indicate that aligning research with practical strategies can enhance its impact and inform professional development for teachers. The observed positive correlations between research operations, planning, and development highlight the interconnectedness of these elements in fostering a robust

research environment, aligning with the study's objective to enhance educational practices; however, the weaker relationship between operations and development suggests that merely implementing strong research practices may not suffice, indicating a need for targeted strategies that address additional factors influencing research effectiveness and teacher professional growth. The findings were supported by Killbourne's et al. (2019) study on the substantial real-world impact of research in schools. The study highlighted that aligning the Research Lifecycle with system investments can enhance the real-world impact of research by adapting innovations for effective school use, thus fostering continuous improvement in teaching. Similarly, Caingcoy (2020) concluded that teachers' research capability is influenced by their motivation, productivity, and age at which they engage in research, leading to recommendations for targeted continuing professional development.

Table 11. Significant Relationships Among the Level of Schools' Research Operations, Planning and Development

Variables		Correlations		
		Schools' Research Operations	Schools' Research Planning	Schools' Research Development
Schools' Research Operations	Pearson Correlation	1	.037**	0.081
	Sig. (2-tailed)		0.000	0.113
	N	385	385	385
Schools' Research Planning	Pearson Correlation	.037**	1	.631**
	Sig. (2-tailed)	0.000		0.000
	N	385	385	385
Schools' Research Development	Pearson Correlation	0.081	.631**	1
	Sig. (2-tailed)	0.113	0.000	
	N	385	385	385

Legend: Correlation is significant at the 0.05 level (2-tailed)

Proposed Policy Enhancement

As an output of the study, a contextualized policy enhancement titled "Integrated Policy Enhancement on Research Management Guidelines" was formulated. The Integrated Policy Enhancement on Research Management Guidelines, anchored in DepEd Order No. 16, s. 2017, aims to strengthen research practices in education. Recognizing the critical role of research in enhancing academic excellence, this proposed policy enhancement seeks to refine guidelines for more effective research management. The key objectives include streamlining research processes, improving research quality, promoting ethical standards, fostering collaboration, and ensuring accountability. The revised guidelines standardize proposal formats, establish a centralized approval process, and set clear timelines. It further proposes improvements in research design, implements ethical training, and fosters partnerships for knowledge sharing. Furthermore, it emphasizes the importance of professional development and resource allocation to support researchers, while monitoring and evaluation mechanisms will ensure compliance and assess impact. Additionally, training sessions and collaborative projects should be planned comprehensively to enhance understanding and implementation. This comprehensive approach aims to create a more efficient, ethical, and impactful research environment, ultimately driving continuous improvement in educational practices.

Conclusion

The findings reveal a very satisfactory level of school research operations in the Schools Division of Iloilo, reflecting a strong commitment to ethical guidelines and collaborative initiatives. This foundation fosters a culture of re-

search, leading to significant educational advancements and improved student outcomes. School research planning received an outstanding rating, showcasing responsiveness to emerging trends and the integration of new technologies, which helps schools stay relevant in a rapidly changing educational landscape. Research development was also rated satisfactory, with schools promoting participation and interdisciplinary collaboration aligned with their missions, enriching the research environment.

Notably, there were no significant differences in teachers' assessments based on demographics, indicating a consistent perception of research operations, planning, and development. This uniformity suggests a shared understanding among educators, strengthening collaborative efforts across diverse groups. While no significant relationship was found between research operations and development, strong correlations were identified between research operations and planning, and between planning and development, emphasizing the need for focused strategic planning to optimize research operations and enhance educational quality.

To further improve research development, it is recommended that schools implement mentorship programs targeting specific demographic groups, ensuring equitable access to research resources and training. Additionally, addressing the challenges related to funding and resource allocation can facilitate more robust research initiatives. By recognizing and addressing potential disparities in teacher engagement and support, schools can foster a more inclusive and effective research culture, ultimately benefiting both educators and students.

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